

CLAIMS

What is claimed is:

1. A digital camera comprising:

a light input device for detecting a first light pulse;

5 a processor, coupled to the light input device;

a timer, initiated by the processor in response to receiving a signal

therefrom indicative of said first light pulse;

wherein the processor is programmed to initiate capture of an image in

10 response to an indication from the timer that lapse of a time period

greater than the duration of said first light pulse has occurred; and

a light output device that transmits a second light pulse in synchronism

with initiation of said capture of an image, in response to a signal

issued from the processor.

2. The camera of claim 1, wherein said time period is slightly greater

15 than the length of time it takes for said first light pulse to decay to a level of zero luminosity.

3. The camera of claim 1, wherein t is a value slightly greater than the length of time it takes for said first light pulse to decay to a level of zero luminosity, and wherein said time period is equal to $n \times t$, where n is an integer

20 representing that said camera is the n th said camera in a multiple-camera system.

4. The camera of claim 1, further including an image capture mode input device for manually selecting one of a plurality of image capture modes, each of which has parameters associated therewith that are used by the

25 processor to determine whether to initiate said capture of an image.

5. The camera of claim 4, wherein said capture of an image is initiated when a detected said light pulse has characteristics that correspond with the parameters associated with a selected one of said image capture modes.

6. The camera of claim 5, further comprising a plurality of optical

30 input devices for detecting said first light pulse including a charge-coupled

device and an infrared light sensor, wherein one of said parameters indicates which one of the optical input devices is used as the light input device.

7. The camera of claim 5, wherein one of said plurality of optical input devices is a serial port transceiver for detecting a predefined light pulse coding sequence and indicating to the processor whether the coding sequence corresponds with one of the parameters associated with a selected one of said image capture modes.

8. The camera of claim 5, wherein one of the parameters associated with a given said image capture mode comprises a specific wavelength range for the detected light pulse.

9. The camera of claim 5, wherein one of the parameters associated with a given said image capture mode indicates that said capture of an image is to be triggered by a shutter button instead of said first light pulse.

10. The camera of claim 1, further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device has pre-established spectral characteristics.

11. The camera of claim 1, further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device is not an extraneous event.

12. The camera of claim 1, further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device has characteristics that correspond with the parameters associated with a selected one of said image capture modes.

25 13. A digital camera comprising:

a plurality of light input devices, each of which is capable of detecting a first light pulse;
a processor, coupled to each one of the plurality of light input devices;
a timer, initiated by the processor in response to receiving a signal
30 therefrom indicative of said first light pulse;

wherein the processor is programmed to initiate exposure of an image in response to an indication from the timer that lapse of a time period greater than the duration of said first light pulse has occurred; an image capture mode input device for manually selecting one of a plurality of image capture modes, each of which has parameters associated therewith that are used by the processor to determine whether to initiate said exposure;

5 wherein one of said parameters indicates which one of the plurality of light input devices is used for detecting said first light pulse; and

10 a light output device that transmits a second light pulse in synchronism with initiation of said exposure, in response to a signal issued from the processor.

14. The digital camera of claim 13, wherein said exposure is initiated when a detected said light pulse has characteristics that correspond with the

15 parameters associated with a selected one of said image capture modes.

15. The camera of claim 13, further including a filter, coupled between the light input device and the processor, for signaling the processor that the light pulse detected by the light input device has pre-established spectral characteristics.

20 16. A system for synchronizing a first exposure of a subject by a first camera with a second exposure of the subject by a second camera, the system comprising the steps of:

simultaneously initiating the first exposure and transmitting a light pulse from the first camera; and

25 initiating the second exposure in response to the second camera receiving the light pulse from the first camera; whereby the subject is photographed from two different viewing angles.

17. The system of claim 16, including the step of waiting a predetermined time after receiving the light pulse from the first camera before

30 initiating the second exposure.

18. The camera of claim 17, wherein said predetermined time is slightly greater than the length of time it takes for said light pulse to decay to a level of zero luminosity.

19. The system of claim 16, further including a third camera, and

5 further comprising the steps of:

transmitting a secondary light pulse from the second camera in response to receiving the light pulse from the first camera; and initiating, by the third camera, a third exposure in response to receiving the light pulse from the second camera.

10 20. The system of claim 16, further including the step of manually selecting one of a plurality of image capture modes, each of which has parameters associated therewith that indicate whether to initiate said second exposure, wherein said second exposure is initiated when a detected said light pulse has characteristics that correspond with the parameters associated with a 15 selected one of said image capture modes.